



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,019	10/30/2003	Ihor Lys	C1104-7048.40	7120
37462	7590	08/09/2005	EXAMINER	
LOWRIE, LANDO & ANASTASI RIVERFRONT OFFICE ONE MAIN STREET, ELEVENTH FLOOR CAMBRIDGE, MA 02142			LEE, WILSON	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/698,019	LYS ET AL.	
	Examiner	Art Unit	
	Wilson Lee	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte* Quayle, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 9-12, 21-25, 27, 30-32, 41 and 42 is/are rejected.
- 7) ☒ Claim(s) 5, 7, 8, 13-20, 26, 28, 29 and 33-40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/30/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/13/04</u> | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections – 35 U.S.C. 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 21, 22, 41, 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claims 21 and 41, line 3, “to absorb energy that would otherwise be reflected” is vague. How can energy be reflected if energy is not an illumination or light?

Claim Rejections – 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6, 9-12, 23-25, 27, 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michael et al. (4,656,398) in view of Phares (5,420,482).

Regarding Claim 1, Michael discloses a track lighting apparatus comprising:

- an essentially rigid linear or curvilinear-shaped housing (e.g. housings that enclose the LED light bulb shown in Figure 2. Light fixture housing. See Figures 1, 2 and 12);
- at least one pair of essentially rigid electrically conductive tracks (82, 134) mechanically coupled to the housing (through wires 412, 162) and configured

- to provide power (through plug 320) and data (through wire 362) to a lighting fixture (See figure 12) when the fixture is coupled to the at least one pair of electrically conductive tracks (See Figures 3 and 12); and
- at least one LED-based lighting fixture (Group A, B, C, LEDs) mechanically coupled to the housing (light fixture housing), electrically coupled to the at least one pair of electrically conductive tracks (82, 134) (See figure 3), and configured to be responsive to the data (data) (See Figure 12).

As discussed above, Michael essentially discloses the claimed invention but does not explicitly disclose a plurality of lighting fixtures. However, it would have been obvious to one of ordinary skill in the art to provide a plurality of lighting fixtures in Michael in order to render larger illumination coverage. For instance, Phares teaches a track comprising a plurality of lighting fixtures (44) in order to provide a decorative lighting and illuminated display signs (See abstract). It would have been obvious to one of ordinary skill in the art to provide a plurality of fixtures in Michael as taught by Phares in order to provide a decorative lighting. Further, it is held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding Claim 2, Michael discloses that the apparatus is configured such that the at least one LED-based lighting fixture (See Figure 12) is detachably (See slide member 80, contacts 164 can slide along the tracks and be detached from the track) coupled to the housing (through the wires) and the at least one pair of electrically

conductive tracks, and movable along a length of the housing (members 80, 164 can be slidable along with the housing).

Regarding Claim 3, Michael discloses that the at least one pair of electrically conductive tracks (82, 134) are configured to provide the power and the data in parallel to the lighting fixture (See Figures 2 and 12).

As discussed above, Michael essentially discloses the claimed invention but does not explicitly disclose a plurality of lighting fixtures. However, it would have been obvious to one of ordinary skill in the art to provide a plurality of lighting fixtures in Michael in order to render larger illumination coverage. For instance, Phares teaches a track comprising a plurality of lighting fixtures (44) in order to provide a decorative lighting and illuminated display signs (See abstract). It would have been obvious to one of ordinary skill in the art to provide a plurality of fixtures in Michael as taught by Phares in order to provide a decorative lighting. Further, it is held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding Claim 4, Michael discloses that the at least one LED-based lighting fixture is configured to process at least the data so as to control at least one of an intensity of radiation generated by the at least one fixture (See Col. 8, lines 48-51), or a color of the generated radiation (See Col. 8, lines 54-68).

Regarding Claim 6, Michael discloses that the at least one LED-based lighting fixture is configured to output at least first radiation (red) having a first wavelength (red color inherently having 650-660 nm wavelength) and second radiation (green) inherently

Art Unit: 2821

having a second wavelength (green color having 570nm wavelength) (See page 290 of Coaton); and the apparatus further comprises at least one controller (378, 144) coupled to the at least one pair of electrically conductive tracks and configured to independently control at least a first intensity of the first radiation and a second intensity of the second radiation output (e.g. separately and selectively be caused to glow with a red, a green or a yellow effect) by the at least one LED-based lighting fixture based at least in part on the data (See Col. 8, line 54 to Col. 10, line 68).

Although Michael does not specify first radiation having a first wavelength and second radiation having second wavelength, different radiation in color inherently comprise different wavelengths (See page 290 of Coaton).

Regarding Claim 9, Michael discloses that the at least one pair (82, 134) of electrically conductive tracks includes only one pair (82, 134) of electrically conductive tracks to provide both the power and the data in parallel to the lighting fixture (See Figures 3 and 12).

As discussed above, Michael essentially discloses the claimed invention but does not explicitly disclose a plurality of lighting fixtures. However, it would have been obvious to one of ordinary skill in the art to provide a plurality of lighting fixtures in Michael in order to render larger illumination coverage. For instance, Phares teaches a track comprising a plurality of lighting fixtures (44) in order to provide a decorative lighting and illuminated display signs (See abstract). It would have been obvious to one of ordinary skill in the art to provide a plurality of fixtures in Michael as taught by Phares in order to provide a decorative lighting. Further, it is held that mere duplication

of parts has no patentable significance unless a new and unexpected result is produced. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding Claim 10, Michael discloses that the at least one pair (82, 134) of electrically conductive tracks (82, 134) includes at least a first track (82) to provide the power to the lighting fixture and at least a second track (134) to provide the data to the lighting fixture (See Figure 3 and 12).

As discussed above, Michael essentially discloses the claimed invention but does not explicitly disclose a plurality of lighting fixtures. However, it would have been obvious to one of ordinary skill in the art to provide a plurality of lighting fixtures in Michael in order to render larger illumination coverage. For instance, Phares teaches a track comprising a plurality of lighting fixtures (44) in order to provide a decorative lighting and illuminated display signs (See abstract). It would have been obvious to one of ordinary skill in the art to provide a plurality of fixtures in Michael as taught by Phares in order to provide a decorative lighting. Further, it is held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding Claim 11, Michael discloses that the at least one pair of electrically conductive tracks (82, 134) is mechanically coupled to the housing (housing of the lighting fixture shown in Figures 1, 2, 12) via one electrical insulator (the casing of plug 414 is inherently made of insulative material so that any user can touch the plug).

Regarding Claim 12, although Michael does not specifically disclose that the housing is metallic, however, it is well known to one of ordinary skill in the art that the

Art Unit: 2821

housing of Michael's lighting fixture is metallic in order to strengthen the protection of the housing and being inserted with the metallic bushing (84) (See Figure 2). Using a metallic housing or non-metallic housing does not create any unexpected result and novelty.

Regarding Claim 23, Michael discloses a lighting method, comprising an act of:

A) providing power and data (power through wire 320 and data through wire 362) to a lighting fixture (housing that encloses the LED light bulb shown in Figures 1, 2, 12) via at least one pair of essentially rigid electrically conductive tracks (82, 134) that are mechanically coupled to an essentially rigid linear or curvilinear-shaped housing (housings that enclose the LED light bulb shown in Figure 2), the lighting fixture including at least one LED-based lighting fixture (LEDs groups shown in Figure 12) mechanically coupled to the housing, electrically coupled to the at least one pair of electrically conductive tracks (82, 134), and configured to be responsive to the data (data from plug 134).

As discussed above, Michael essentially discloses the claimed invention but does not explicitly disclose a plurality of lighting fixtures. However, it would have been obvious to one of ordinary skill in the art to provide a plurality of lighting fixtures in Michael in order to render larger illumination coverage. For instance, Phares teaches a track comprising a plurality of lighting fixtures (44) in order to provide a decorative lighting and illuminated display signs (See abstract). It would have been obvious to one of ordinary skill in the art to provide a plurality of fixtures in Michael as taught by Phares in order to provide a decorative lighting. Further, it is held that mere duplication

Art Unit: 2821

of parts has no patentable significance unless a new and unexpected result is produced. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding Claim 24, Michael discloses that the act A) includes an act of:
providing the power and the data in parallel to the lighting fixture via the at least one pair of essentially rigid electrically conductive tracks (82, 134).

As discussed above, Michael essentially discloses the claimed invention but does not explicitly disclose a plurality of lighting fixtures. However, it would have been obvious to one of ordinary skill in the art to provide a plurality of lighting fixtures in Michael in order to render larger illumination coverage. For instance, Phares teaches a track comprising a plurality of lighting fixtures (44) in order to provide a decorative lighting and illuminated display signs (See abstract). It would have been obvious to one of ordinary skill in the art to provide a plurality of fixtures in Michael as taught by Phares in order to provide a decorative lighting. Further, it is held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding Claim 25, Michael discloses that the act A) includes an act of:
processing at least the data so as to control at least one of an intensity of radiation generated by the at least one LED-based lighting fixture, a color of the generated radiation. (See Col. 8, lines 48-51 and See Col. 8, lines 54-68).

Regarding Claim 31, Michael discloses the at least one LED-based lighting fixture is configured to output at least first radiation (red) having a first wavelength (red color inherently having 650-660 nm wavelength) and second radiation (green) having a

Art Unit: 2821

second wavelength (green color having 570 nm wavelength) (See page 290 of Coaton), and wherein the act A) includes an act of: B) providing at least the data so as to independently control (controlled by 378, 144) at least a first intensity of the first radiation and a second intensity of the second radiation output by the at least one LED-based lighting fixture (e.g. separately and selectively be caused to glow with red, a green, or a yellow effect) (See Col. 8, line 54 to Col. 10, line 68).

Although Michael does not specify first radiation having a first wavelength and second radiation having second wavelength, different radiation in color inherently comprise different wavelengths (See page 290 of Coaton).

Regarding Claim 30, Michael discloses that the at least one pair of electrically conductive tracks (82, 134) includes only one pair of electrically conductive tracks (82, 134), and wherein the act A) includes an act of: providing both the power (from track 82) and the data (from track 134) in parallel to the lighting fixture only via the one pair of electrically conductive tracks (82, 134).

As discussed above, Michael essentially discloses the claimed invention but does not explicitly disclose a plurality of lighting fixtures. However, it would have been obvious to one of ordinary skill in the art to provide a plurality of lighting fixtures in Michael in order to render larger illumination coverage. For instance, Phares teaches a track comprising a plurality of lighting fixtures (44) in order to provide a decorative lighting and illuminated display signs (See abstract). It would have been obvious to one of ordinary skill in the art to provide a plurality of fixtures in Michael as taught by Phares in order to provide a decorative lighting. Further, it is held that mere duplication

of parts has no patentable significance unless a new and unexpected result is produced. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding Claim 31, Michael discloses the at least one pair of electrically conductive tracks (82, 134) includes at least a first track (82) and a second track (134), and wherein the act A) includes acts of: providing the power to the lighting fixture via at least the first track (82); and providing the data to the lighting fixture via at least the second track (134).

As discussed above, Michael essentially discloses the claimed invention but does not explicitly disclose a plurality of lighting fixtures. However, it would have been obvious to one of ordinary skill in the art to provide a plurality of lighting fixtures in Michael in order to render larger illumination coverage. For instance, Phares teaches a track comprising a plurality of lighting fixtures (44) in order to provide a decorative lighting and illuminated display signs (See abstract). It would have been obvious to one of ordinary skill in the art to provide a plurality of fixtures in Michael as taught by Phares in order to provide a decorative lighting. Further, it is held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding Claim 32, Michael discloses that the at least one pair of electrically conductive tracks is mechanically coupled to the housing (housing of the lighting fixture shown in Figures 1, 2, 12) via at least one electrical insulator (the casing of plug 414 is inherently made of insulative material so that any user can touch the plug).

As discussed above, Michael essentially discloses the claimed invention but does not explicitly disclose a plurality of lighting fixtures. However, it would have been obvious to one of ordinary skill in the art to provide a plurality of lighting fixtures in Michael in order to render larger illumination coverage. For instance, Phares teaches a track comprising a plurality of lighting fixtures (44) in order to provide a decorative lighting and illuminated display signs (See abstract). It would have been obvious to one of ordinary skill in the art to provide a plurality of fixtures in Michael as taught by Phares in order to provide a decorative lighting. Further, it is held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Allowable subject matter

Claims 5, 7, 8, 13-20, 26, 28, 29, 33-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 21, 22, 41, 42 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

IDS

All the court cases have been withdrawn from consideration because they are neither book, magazine, journal, serial, symposium nor catalog.

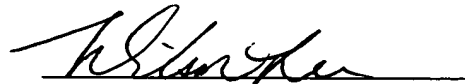
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Vernondier (5,107,408) discloses lighting system comprising a track and LEDs fixtures. Coaton discloses the colors of LED having different wavelength.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (571) 272-1824. The official fax number is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Wilson Lee
Primary Examiner
U.S. Patent & Trademark Office

8/8/05